Advanced Manufacturing

Lea Anne Crooks, Ivy Tech Community College

George Telthorst, Bloomington Life Sciences

John Stevens, Ivy Tech Community College

Dr. Charles Pressler, Workforce Development Group

Dave Glass, LHP Software

Soft Skills Incumbent Worker Training EGR 7

By Lea Anne Crooks

Ivy Tech Community College

Determining the Need

- Consistently stated as lacking in the current workforce
- Typically not funded through other grants
- Companies normally don't pay for this type of training (needed to show value through metrics)

Curriculum

- Communication
- Team Building
- Stress Management
- Conflict Resolution and Prevention
- Understanding and Appreciation of Other's Differences

Goals

- Improve
 - Retention
 - Attendance
 - Tardiness Rate
 - Grievance Rate
 - Promote
 - Career Advancement
 - Job growth

Metrics

- 100 Hoosier Workers Trained
- Year 2 Follow Up
- Compare to other employees
- Compare to previous year's data





- John Stephens- Executive Director Life Science Initiatives- Ivy Tech Bloomington
- George Telthorst- Director of Bloomington Life Science Partnership

Relationship Interaction

Education Industry Civic Agencies

Marketing-IT

BIO HIRE - IT

BMTC - IT

MRC - IT

MLS - IU

Center - IT

Marketing

Bio

BMTC

MRC

MLS

Center

Marketing

Bio

BMTC

MRC

MLS

Center

Future Workforce Preparation

Course

Length

Content

BIO HIRE

BMTC

Six Weeks

soft skills, computer assessment,

intro to industry

(Help In Reaching Employment)

Eight Weeks

quality aspects, labs, processes,

overviews

(Bio Manufacturing Technician Cert.)

MRC Three Days

gowning, gmp's, lean/sigma

(Manufacturing Readiness Cert.)

MLS

Sixteen Weeks

project mgt, org. dev,

(Managing in the Life Sciences)

teamwork, quality

Indiana Center for the Life Sciences

- Approx. 20k sq. ft.
- 4 Labs
- 3 Classrooms
- 1 Manufacturing suite and 4 specific training areas
- Support areas
- Location- Ivy Tech property east of campus

Marketing

Radio Advertising

"Some people fear change, but not you, no, you shaved that mullet, you traded in that Trans-Am for a minivan, but now it's time to tackle that dead-end job of yours. Need a career change? Get training for jobs in the Life Sciences, including lab operations, medical product assembly, inventory and logistics, quality control and machine operations. Make a change for the better! Call Melodie at Ivy Tech at 330-6245 or Kay at Work One at 331-6000. Brought to you by

industry, educational and

governmental partners."



Lessons Learned

- Criticality of Marketing (widespread population area)
- Early and Frequent Industry Participation
- Continuous Events
- Heavy Coordination and Facilitation

EGR2 Advanced Manufacturing

Focus on orthopedics manufacturing, Kosciusko County.....

The pain, the pain =

Competition

Dr. Charles Pressler,
Workforce Development Group





Indiana Department of Workforce Development



Occupational Goal:
CNC Machinists,
with knowledge of
programming – not
just "button-pushers."



Data to Date (all EGR2 advanced manufacturing)

- SSI funding allocation \$669,009
- Year-to-date expenditures \$152,859 (24%)

Equipment (EDM machine) - \$76,000

Tuition - \$76,859

Students enrolled –

Cohort 1: CNC Machinist 20

Welding 10

Cohort 2: CNC Machinist 17

Welding 2

Certifications awarded: 9 AWS* (7 MIG, 2 TIG)

*American Welding Society



David Glass
President
LHP Software, LLC

Embedded Systems

- Embedded Micro Controllers are integrated into an application to process electronic signals and control the application
- Contains software algorithms hard coded into the embedded system to predetermine actions based on monitored input signals
- Applications
 - Automotive (Gas, Diesel and Hybrid Vehicles- Cleaner and Safer)
 - Medical Device (Hospital Beds, Heart Monitors, ...)
 - Military (Missile Guidance, Space Craft, Autonomous Vehicles)
 - Commercial Products (Entertainment, Appliances, etc.)
 - Robotics (Manufacturing, ...)

Business Situation

- LHP is an Indiana based start up company focused on embedded systems and software engineering
- Achieved rapid growth from 2 employees to 180 employees during first 6 years of operation
- Consulting services provided to fortune 500 manufacturing companies in Automotive, Medical and Military industries to advance technologies in commercial products

Training Needs

- 75% of new hires have advance degrees in Mechanical, Electrical and Computer Engineering
- Training requirements for new hires range from 4 to 6 months to become productive
- Ongoing training required to keep existing employees current with new technologies and to advance company towards new business opportunities

SSI Training Grant Benefits

- Helps LHP to maintain high growth rate by training workforce to support new business initiatives
- Supports effort to hire more college graduates and attract professional engineers to Indiana building a highly skilled workforce
- Helps to retain current engineering talent looking for new technical challenges and continuing career development
- Allows LHP to hire more students looking for internship throughout high school and college

Presenter Information

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